

CLAIMS

What is claimed is:

1. An electronic device package comprising:
a transparent substrate;
a plurality of conductive traces formed on a surface of the transparent substrate, each conductive trace of the plurality of conductive traces having a first attachment point and a second attachment point;
an optically interactive electronic device having at least one bond pad, the optically interactive electronic device mounted to the transparent substrate by a bond between the first attachment point of a conductive trace of the plurality of conductive traces and the at least one bond pad; and
a backing cap covering a back surface of the optically interactive electronic device, the backing cap having at least one backing cap attachment point in electrical communication with the second attachment point of the conductive trace and at least one attachment pad on a surface of the backing cap in electrical communication with the at least one backing cap attachment point.
2. The electronic device package according to claim 1, further comprising:
a bond between the at least one backing cap attachment point and the second attachment point of the conductive trace, the bond comprising one of a conductive or conductor filled epoxy, a solder joint and a layer of anisotropically conductive adhesive material.
3. The electronic device package according to claim 1, further comprising:
an array of attachment pads on the second surface of the backing cap.
4. The electronic device package according to claim 1, further comprising:
a discrete conductive element attached to the at least one attachment pad on the second surface of the backing cap.

5. The electronic device package according to claim 4, wherein the discrete conductive element comprises one of a solder ball, a solder column, a conductive epoxy, and a conductor-filled epoxy.

6. The electronic device package according to claim 1, wherein the plurality of conductive traces comprise a material from the group consisting of a conductive epoxy, a conductor filled epoxy, a metal, an alloy and a polysilicon.

7. The electronic device package according to claim 1, wherein the optically interactive electronic device comprises an image sensor.

8. The electronic device package according to claim 1, wherein the transparent substrate comprises a single substrate having multiple optically interactive electronic devices mounted thereto.

9. An electronic device package comprising:
a transparent substrate;
a secondary substrate secured by a first surface thereof to a surface of the transparent substrate.
having a central aperture covered by the transparent substrate and a plurality of conductive traces formed around the central aperture, each conductive trace of the plurality of conductive traces having a first attachment point and a second attachment point on a second surface of the secondary substrate;
an optically interactive electronic device having at least one bond pad, the optically interactive electronic device mounted to the secondary substrate by a bond between the first attachment point of a conductive trace of the plurality of conductive traces and the at least one bond pad; and
a backing cap covering a back surface of the optically interactive electronic device, the backing cap having at least one backing cap attachment point in electrical communication with the second attachment point of the conductive trace and at least one attachment pad on a

surface of the backing cap in electrical communication with the at least one backing cap attachment point.

10. The electronic device package according to claim 9, further comprising:
a bond between the at least one backing cap attachment point and the second attachment point of the conductive trace, the bond comprising one of a conductive or conductor-filled epoxy, a solder joint and a layer of anisotropically conductive adhesive material.

11. The electronic device package according to claim 9, further comprising:
an array of attachment pads on the surface of the backing cap.

12. The electronic device package according to claim 9, further comprising:
a discrete conductive element disposed on the at least one attachment pad on the surface of the backing cap.

13. The electronic device package according to claim 12, wherein the discrete conductive element comprises one of a solder ball, a solder column, a conductive epoxy, and a conductor-filled epoxy.

14. The electronic device package according to claim 9, wherein the secondary substrate comprises one of a printed circuit board, a polyimide film a ceramic and silicon.

15. The electronic device package according to claim 9, wherein an outside perimeter of the secondary substrate is substantially equal to an outside perimeter of the transparent substrate.

16. The electronic device package according to claim 9, wherein the optically interactive electronic device comprises an image sensor.

17. The electronic device package according to claim 9, wherein the transparent substrate comprises a single substrate having a plurality of optically interactive electronic devices mounted thereto.